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IPC reform
NEWS 8 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
USPAT2
NEWS 9 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
INPADOC
NEWS 11 JAN 17 Pre-1988 INPI data added to MARPAT
NEWS 12 JAN 17 IPC 8 in the WPI family of databases including WPIFV
NEWS 13 JAN 30 Saved answer limit increased
NEWS 14 JAN 31 Monthly current-awareness alert (SDI) frequency
added to TULSA
NEWS 15 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist
visualization results
NEWS 16 FEB 22 Status of current WO (PCT) information on STN
NEWS 17 FEB 22 The IPC thesaurus added to additional patent databases on STN
NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added
NEWS 19 FEB 27 New STN AnaVist pricing effective March 1, 2006
NEWS 20 FEB 28 MEDLINE/LMEDLINE reload improves functionality
NEWS 21 FEB 28 TOXCENTER reloaded with enhancements
NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral
property data
NEWS 23 MAR 01 INSPEC reloaded and enhanced
NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
<http://download.cas.org/express/v8.0-Discover/>

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FILE COVERS 1907 - 6 Mar 2006 VOL 144 ISS 11

FILE LAST UPDATED: 5 Mar 2006 (20060305/ED)

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=> s perfluoroalkylat?

L1 757 PERFLUOROALKYLAT?

=> s l1 and tris(1a)perfluoroalkyl (1a) phosphine oxide

120062 TRIS

10810 PERFLUOROALKYL

32 PERFLUOROALKYLS

10828 PERFLUOROALKYL

(PERFLUOROALKYL OR PERFLUOROALKYLS)

67165 PHOSPHINE

16032 PHOSPHINES

71603 PHOSPHINE

(PHOSPHINE OR PHOSPHINES)

1630418 OXIDE

337424 OXIDES

1726440 OXIDE

(OXIDE OR OXIDES)

10256 PHOSPHINE OXIDE

(PHOSPHINE(W) OXIDE)

9 TRIS(1A)PERFLUOROALKYL (1A) PHOSPHINE OXIDE

L2 1 L1 AND TRIS(1A)PERFLUOROALKYL (1A) PHOSPHINE OXIDE

=> d l2 ibib ab

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:837015 CAPLUS

DOCUMENT NUMBER: 139:323332

TITLE: Method for perfluoroalkylation of
carbonyl-containing organic compounds and/or
tricoordinated organoboron compounds with tris
(perfluoroalkyl)phosphine
oxides in the presence of a base

INVENTOR(S): Ignatyev, Nikolai; Welz-Biermann, Urs; Schmidt,
Michael; Weiden, Michael; Heider, Udo; Willner, Helge;
Sartori, Peter; Miller, Alexej

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087020	A1	20031023	WO 2003-EP2741	20030317
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10216996	A1	20031030	DE 2002-10216996	20020416
AU 2003219062	A1	20031027	AU 2003-219062	20030317
EP 1494982	A1	20050112	EP 2003-714833	20030317
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005119513	A1	20050602	US 2003-511156	20030317
JP 2005522496	T2	20050728	JP 2003-583979	20030317
PRIORITY APPLN. INFO.: DE 2002-10216996 A 20020416 WO 2003-EP2741 W 20030317				

AB The invention relates to a method for perfluoroalkylation of
carbonyl-containing organic compds. and/or tricoordinated organoboron compds.
with tris(perfluoroalkyl)phosphine
oxides in the presence of a base. Thus, a mixture of KF and (MeO)3B
in 1,2-dimethoxyethane was treated with tris(pentafluoroethyl)phosphine
oxide (preparation given) at -40° followed by stirring for 1 h at
-30° to give 53.6% potassium pentafluoroethyltrisfluoroborate
[(C2F5)BF3K].

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

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L1 757 S PERFLUOROALKYLAT?

L2 1 S L1 AND TRIS(1A)PERFLUOROALKYL (1A) PHOSPHINE OXIDE

=> s 11 and phosphine oxide

67165 PHOSPHINE

16032 PHOSPHINES

71603 PHOSPHINE

(PHOSPHINE OR PHOSPHINES)

1630418 OXIDE

337424 OXIDES
1726440 OXIDE
(OXIDE OR OXIDES)
10256 PHOSPHINE OXIDE
(PHOSPHINE(W) OXIDE)
L3 5 L1 AND PHOSPHINE OXIDE

=> s l3 not l2

L4 4 L3 NOT L2

=> d l4 ibib ab 1-4

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1178194 CAPLUS
DOCUMENT NUMBER: 144:69902
TITLE: Synthesis of fluorous trialkyl phosphines with the complete exclusion of PH₃
AUTHOR(S): Vlad, Gabor; Richter, Frank U.; Horvath, Istvan T.
CORPORATE SOURCE: Department of Chemical Technology and Environmental Chemistry, Eoetvoes University, Budapest, H-1117, Hung.
SOURCE: Tetrahedron Letters (2005), 46(49), 8605-8608
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:69902

AB A novel synthetic protocol was developed for the synthesis of fluorous tertiary phosphines excluding the use of hazardous PH₃ and with control over the number of methylene spacers and the length of fluorous ponytails. The protocol starts with radical addition reaction of 2 equiv (perfluoroalkyl)alkene to 1 equiv PhPH₂ in presence of AIBN to give 87-93% bis[bis(perfluoroalkyl)alkyl]phenylphosphine. This phosphine in turn is alkylated with a (perfluoroalkyl)alkyl iodide to afford the corresponding phosphonium salt in 78-91% yield, which is converted to a phosphine oxide in 43-74% yield by selective removal of the Ph group with NaOH. Reduction of the phosphine oxide with HSiCl₃ affords the fluorinated phosphines in 37-65% yield. E.g., radical addition of 3-perfluorooctyl-1-propene (RF₈CH₂CH:CH₂) to PhPH₂ in presence of AIBN at 78-80° without solvent gave 93% PhP[(CH₂)₃RF₈]₂, which underwent further alkylation with RF₈(CH₂)₃I, dephenylation and reduction to give P[(CH₂)₃RF₈]₃.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:565048 CAPLUS
DOCUMENT NUMBER: 135:137619
TITLE: A method of generating a functionalized arylphosphine
INVENTOR(S): Xiao, Jianliang; Chen, Weiping
PATENT ASSIGNEE(S): University of Liverpool, UK
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001055156	A1	20010802	WO 2001-GB367	20010129
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,			

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1250341 A1 20021023 EP 2001-946866 20010129
 EP 1250341 B1 20040331
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 JP 2003523362 T2 20030805 JP 2001-561014 20010129
 AT 263177 E 20040415 AT 2001-946866 20010129
 PT 1250341 T 20040730 PT 2001-946866 20010129
 ES 2218425 T3 20041116 ES 2001-1946866 20010129
 US 2003181767 A1 20030925 US 2002-182332 20021108
 US 2004059159 A2 20040325
 PRIORITY APPLN. INFO.: GB 2000-1859 A 20000128
 WO 2001-GB367 W 20010129
 OTHER SOURCE(S): CASREACT 135:137619
 AB A method of generating functionalized arylphosphine, novel intermediates
 and novel functionalized arylphosphines is described. Thus, copper
 powder/2,2'-bipyridine mediated reaction of tris(4-bromophenyl)
 phosphine oxide with 1-iodoperfluorohexene in DMSO gave
 91% tris(4-perfluorohexylphenyl)phosphine oxide.
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

 L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:379768 CAPLUS
 DOCUMENT NUMBER: 133:120393
 TITLE: Novel and efficient synthesis of
 perfluoroalkylated arylphosphines
 AUTHOR(S): Chen, Weiping; Xiao, Jianliang
 CORPORATE SOURCE: Leverhulme Centre for Innovative Catalysis, Department
 of Chemistry, University of Liverpool, Liverpool, L69
 7ZD, UK
 SOURCE: Tetrahedron Letters (2000), 41(19), 3697-3700
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 133:120393
 AB A novel, high-yield route was developed for the synthesis of
 perfluoroalkylated arylphosphines, involving simple, Cu-mediated
 coupling of haloarylphosphine oxides with perfluoroalkyl iodides followed
 by reduction with trichlorosilane.
 REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

 L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1974:133558 CAPLUS
 DOCUMENT NUMBER: 80:133558
 TITLE: Perfluoroalkylated acids of phosphorus.
 III. Diphenyl(trifluoromethyl)- and
 diphenyl(trifluoroacetyl)phosphine
 oxide as intermediates in the preparation of
 bis(trifluoromethyl)diphenylphosphoranyl
 diphenylphosphinate
 AUTHOR(S): Sartori, P.; Hochleitner, R.
 CORPORATE SOURCE: Inst. Anorg. Chem., Tech. Hochsch. Aachen, Aachen,
 Fed. Rep. Ger.
 SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie
 (1974), 404(2), 164-6
 CODEN: ZAACAB; ISSN: 0044-2313

DOCUMENT TYPE: Journal
LANGUAGE: German
AB Reaction of Ph₂PCl with CF₃CO₂H at 40° gave Ph₂P(O)CF₃ and Ph₂P(O)COCF₃ as shown by ir, NMR and mass spectra. Above reaction followed by heating 6 hr at 160-70°/2+ 10-2 mm gave 70% Ph₂P(O)OPPh₂(CF₃)₂.

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L1 757 S PERFLUOROALKYLAT?
L2 1 S L1 AND TRIS(1A)PERFLUOROALKYL (1A) PHOSPHINE OXIDE
L3 5 S L1 AND PHOSPHINE OXIDE
L4 4 S L3 NOT L2

=> s l1 and substrate
850627 SUBSTRATE
389736 SUBSTRATES
1061803 SUBSTRATE
(SUBSTRATE OR SUBSTRATES)

L5 28 L1 AND SUBSTRATE

=> s l5 and base
656980 BASE
149908 BASES
748400 BASE
(BASE OR BASES)

L6 3 L5 AND BASE

=> s l6 not l4
L7 3 L6 NOT L4

=> d l7 ibib ab 1-3

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:837099 CAPLUS
DOCUMENT NUMBER: 139:323661
TITLE: Process for the production of
(perfluoroalkyl)phosphines by reaction of
fluoro(perfluoroalkyl)phosphoranes with hydride donors
and their use as perfluoroalkylating
reagents
INVENTOR(S): Welz-Biermann, Urs; Ignatyev, Nikolai; Weiden,
Michael; Schmidt, Michael; Heider, Udo; Miller,
Alexej; Willner, Helge; Sartori, Peter
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087113	A1	20031023	WO 2003-EP2739	20030317
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,				

UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 DE 10216998 A1 20031113 DE 2002-10216998 20020418
 AU 2003218773 A1 20031027 AU 2003-218773 20030317
 EP 1495037 A1 20050112 EP 2003-712029 20030317
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2005131256 A1 20050616 US 2003-511554 20030317
 JP 2005522512 T2 20050728 JP 2003-584069 20030317
 PRIORITY APPLN. INFO.: DE 2002-10216998 A 20020418
 WO 2003-EP2739 W 20030317

OTHER SOURCE(S): CASREACT 139:323661; MARPAT 139:323661
 AB (perfluoroalkyl)phosphines were prepared by solventless reaction at reflux
 of at least 1 fluoro(perfluoroalkyl)phosphorane (CnF2n+1)mPF5-m
 (1≤n≤8, preferably 1≤n≤4; m = 1, 2, 3) with
 equimolar or excess amts. of at least 1 hydride ion donor (hydride donors
 = hydrosilanes, alkyl(hydro)silanes, metal hydrides, borohydrides,
 hydroborates); tris(perfluoroalkyl)phosphines thus prepared are useful for
 perfluoroalkylation of chemical substrates, preferably
 tricoordinated organoboron compds. and/or carbonyl group-containing organic
 compds., in presence of a base. In an example, treating 0.54
 mol (C2F5)3PF2 with 1.089 mol NaBH4 at reflux for 3 h with vigorous
 stirring gave 93% (C2F5)3P, which subsequently was treated with KOBu-t and
 benzophenone in THF to give 62% CF3CF2C(OH)Ph2.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:575734 CAPLUS
 DOCUMENT NUMBER: 137:142846
 TITLE: Anti-wear , antifriction fluoroalkylated additives for
 lubricants containing polar head groups
 INVENTOR(S): Beatty, Richard Paul; Morken, Peter Arnold
 PATENT ASSIGNEE(S): E. I. Dupont de Nemours and Co., USA
 SOURCE: U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U.S.
 Ser. No. 408,829., abandoned.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002103090	A1	20020801	US 2001-41808	20011019
US 6642186	B2	20031104		
PRIORITY APPLN. INFO.:			US 1998-102845P	P 19981002
			US 1999-408829	B2 19990929

AB Organic compds. containing selected functional groups, and which are grafted
 with
 fluorinated olefins, are excellent additives for lubricants which lower
 wear and/or friction between metal parts. Functional groups are chosen
 such that they may adsorb onto the metal surfaces. The functional groups
 may be carboxylic, phosphorus-containing, or dithiophosphorus esters, amides,
 nitrogen-containing, and heterocyclic compds., preferably fatty alc. esters of
 carboxylic acids. The fluorinated content of the additive should exceed 5
 % by weight

L7 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:440215 CAPLUS
 DOCUMENT NUMBER: 127:50384

TITLE: Perfluoroalkylation of ketones and other electrophiles
 INVENTOR(S): Roques, Nicolas; Russell, James
 PATENT ASSIGNEE(S): Rhone-Poulenc Chimie SA, Fr.; Roques, Nicolas; Russell, James
 SOURCE: PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9719038	A1	19970529	WO 1996-FR1854	19961122
W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2741618	A1	19970530	FR 1995-13996	19951123
FR 2741618	B1	19980306		
AU 9676991	A1	19970611	AU 1996-76991	19961122
EP 863857	A1	19980916	EP 1996-939969	19961122
EP 863857	B1	20021009		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1207089	A	19990203	CN 1996-199482	19961122
JP 2000500480	T2	20000118	JP 1997-519458	19961122
AT 225761	E	20021015	AT 1996-939969	19961122
ES 2180811	T3	20030216	ES 1996-939969	19961122
US 6096926	A	20000801	US 1999-77131	19990222
US 6355849	B1	20020312	US 2000-506358	20000217
PRIORITY APPLN. INFO.:			FR 1995-13996	A 19951123
			FR 1996-14134	A 19961115
			WO 1996-FR1854	W 19961122
			US 1999-77131	A1 19990222

OTHER SOURCE(S): CASREACT 127:50384; MARPAT 127:50384

AB The title method comprises contacting a material of formula RH (R = perfluoroalkyl) and a base, or a species capable of generating a base, with a substrate bearing at least one electrophilic group in a polar anhydrous medium. Thus, PhCHO and CF₃H in DMF containing Me₃COH at -10° gave 73% PhCH(OH)CF₃.

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NEWS 7 DEC 21 IPC search and display fields enhanced in CA/CAPLUS with the
IPC reform
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USPAT2
NEWS 9 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
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NEWS 21 FEB 28 TOXCENTER reloaded with enhancements
NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral
property data
NEWS 23 MAR 01 INSPEC reloaded and enhanced
NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
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=> s (perfluoroalkylat? (l) tris (l) phosphine).ti.

MISSING OPERATOR PHOSPHINE).TI.

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s perfluoroalkylat? (l) tris (l) phosphine

757 PERFLUOROALKYLAT?

120062 TRIS

67165 PHOSPHINE

16032 PHOSPHINES

71603 PHOSPHINE

(PHOSPHINE OR PHOSPHINES)

L1 6 PERFLUOROALKYLAT? (L) TRIS (L) PHOSPHINE

=> d l1 ibib ab 1-6

L1 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:837099 CAPLUS

DOCUMENT NUMBER: 139:323661

TITLE: Process for the production of (perfluoroalkyl)phosphines by reaction of fluoro(perfluoroalkyl)phosphoranes with hydride donors and their use as perfluoroalkylating reagents

INVENTOR(S): Welz-Biermann, Urs; Ignatyev, Nikolai; Weiden, Michael; Schmidt, Michael; Heider, Udo; Miller, Alexej; Willner, Helge; Sartori, Peter

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087113	A1	20031023	WO 2003-EP2739	20030317
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10216998	A1	20031113	DE 2002-10216998	20020418
AU 2003218773	A1	20031027	AU 2003-218773	20030317
EP 1495037	A1	20050112	EP 2003-712029	20030317
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005131256	A1	20050616	US 2003-511554	20030317
JP 2005522512	T2	20050728	JP 2003-584069	20030317
PRIORITY APPLN. INFO.:			DE 2002-10216998	A 20020418
			WO 2003-EP2739	W 20030317

OTHER SOURCE(S): CASREACT 139:323661; MARPAT 139:323661

AB (perfluoroalkyl)phosphines were prepared by solventless reaction at reflux of at least 1 fluoro(perfluoroalkyl)phosphorane ($C_nF_{2n+1}mPF_5-m$ ($1 \leq n \leq 8$, preferably $1 \leq n \leq 4$; $m = 1, 2, 3$) with equimolar or excess amts. of at least 1 hydride ion donor (hydride donors = hydrosilanes, alkyl(hydro)silanes, metal hydrides, borohydrides, hydroborates); tris(perfluoroalkyl)phosphines thus prepared are useful for perfluoroalkylation of chemical substrates, preferably tricoordinated organoboron compds. and/or carbonyl group-containing organic compds., in presence of a base. In an example, treating 0.54 mol $(C_2F_5)_3PF_2$ with 1.089 mol $NaBH_4$ at reflux for 3 h with vigorous stirring gave 93% $(C_2F_5)_3P$, which subsequently was treated with $KOBu-t$ and benzophenone in THF to give 62% $CF_3CF_2C(OH)Ph_2$.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:837015 CAPLUS

DOCUMENT NUMBER: 139:323332

TITLE: Method for perfluoroalkylation of carbonyl-containing organic compounds and/or tricoordinated organoboron compounds with tris(perfluoroalkyl)phosphine oxides in the presence of a base

INVENTOR(S): Ignatyev, Nikolai; Welz-Biermann, Urs; Schmidt, Michael; Weiden, Michael; Heider, Udo; Willner, Helge; Sartori, Peter; Miller, Alexej

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003087020	A1	20031023	WO 2003-EP2741	20030317
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10216996	A1	20031030	DE 2002-10216996	20020416
AU 2003219062	A1	20031027	AU 2003-219062	20030317
EP 1494982	A1	20050112	EP 2003-714833	20030317
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005119513	A1	20050602	US 2003-511156	20030317
JP 2005522496	T2	20050728	JP 2003-583979	20030317
PRIORITY APPLN. INFO.: DE 2002-10216996 A 20020416				
WO 2003-EP2741 W 20030317				

AB The invention relates to a method for **perfluoroalkylation** of carbonyl-containing organic compds. and/or tricoordinated organoboron compds. with **tris(perfluoroalkyl)phosphine** oxides in the presence of a base. Thus, a mixture of KF and (MeO)₃B in 1,2-dimethoxyethane was treated with **tris(pentafluoroethyl)phosphine** oxide (preparation given) at -40° followed by stirring for 1 h at -30° to give 53.6% potassium pentafluoroethyltrisfluoroborate [(C₂F₅)BF₃K].

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:274313 CAPLUS

DOCUMENT NUMBER: 140:180952

TITLE: Asymmetric hydrogenation with perfluoroalkylated monodentate phosphorus(III) ligands in supercritical CO₂ and CH₂Cl₂

AUTHOR(S): Adams, Dave J.; Chen, Weipen; Hope, Eric G.; Lange, Susanne; Stuart, Alison M.; West, Andrew; Xiao, Jianliang

CORPORATE SOURCE: Dept. of Chemistry, University of Leicester, Leicester, LE1 7RH, UK

SOURCE: Green Chemistry (2003), 5(2), 118-122
CODEN: GRCHFJ; ISSN: 1463-9262

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:180952

AB Four chiral perfluoroalkylated monodentate phosphorus(III) ligands have been prepared and characterized. These ligands have been evaluated in the rhodium-catalyzed asym. hydrogenation of di-Me itaconate in both dichloromethane and supercrit. CO₂ (scCO₂) and compared with the parent, non-perfluoroalkylated, catalyst systems.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:565048 CAPLUS

DOCUMENT NUMBER: 135:137619

TITLE: A method of generating a functionalized arylphosphine

INVENTOR(S): Xiao, Jianliang; Chen, Weiping

PATENT ASSIGNEE(S): University of Liverpool, UK

SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001055156	A1	20010802	WO 2001-GB367	20010129
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1250341	A1	20021023	EP 2001-946866	20010129
EP 1250341	B1	20040331		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2003523362	T2	20030805	JP 2001-561014	20010129
AT 263177	E	20040415	AT 2001-946866	20010129
PT 1250341	T	20040730	PT 2001-946866	20010129
ES 2218425	T3	20041116	ES 2001-1946866	20010129
US 2003181767	A1	20030925	US 2002-182332	20021108
US 2004059159	A2	20040325		

PRIORITY APPLN. INFO.: GB 2000-1859 A 20000128
WO 2001-GB367 W 20010129

OTHER SOURCE(S): CASREACT 135:137619

AB A method of generating functionalized arylphosphine, novel intermediates and novel functionalized arylphosphines is described. Thus, copper powder/2,2'-bipyridine mediated reaction of tris(4-bromophenyl)phosphine oxide with 1-iodoperfluorohexene in DMSO gave 91% tris(4-perfluorohexylphenyl)phosphine oxide.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:379768 CAPLUS

DOCUMENT NUMBER: 133:120393

TITLE: Novel and efficient synthesis of perfluoroalkylated arylphosphines

AUTHOR(S): Chen, Weiping; Xiao, Jianliang

CORPORATE SOURCE: Leverhulme Centre for Innovative Catalysis, Department of Chemistry, University of Liverpool, Liverpool, L69 7ZD, UK

SOURCE: Tetrahedron Letters (2000), 41(19), 3697-3700

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:120393

AB A novel, high-yield route was developed for the synthesis of perfluoroalkylated arylphosphines, involving simple, Cu-mediated coupling of haloarylphosphine oxides with perfluoroalkyl iodides followed by reduction with trichlorosilane.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:517411 CAPLUS

DOCUMENT NUMBER: 119:117411
TITLE: Perfluoroalkylation of chlorotriethylgermane
with perfluoroalkyl bromides and iodides and
tris(diethylamino)phosphine
AUTHOR(S): Bardin, Vadim V.
CORPORATE SOURCE: Inst. Org. Chem., Novosibirsk, 630090, Russia
SOURCE: Synthetic Communications (1993), 23(10), 1409-13
CODEN: SYNCAV; ISSN: 0039-7911
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:117411
AB RFG₃Et₃ were prepared by reaction of CF₃Br, CF₃I or C₄F₉Br with P(NEt₂)₃
whereas CF₂BrCF₂Br underwent by debromination and tert-C₄F₉I gave only
FGeEt₃. Interaction of CCl₄, ClGeEt₃ and P(NEt₂)₃ led to formation of
CCl₃GeEt₃.

=> d his

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FILE 'CAPLUS' ENTERED AT 12:58:44 ON 06 MAR 2006

L1 6 S PERFLUOROALKYLAT? (L) TRIS (L) PHOSPHINE

=> s perfluoroalkylat? (l) phosphine oxide

757 PERFLUOROALKYLAT?
67165 PHOSPHINE
16032 PHOSPHINES
71603 PHOSPHINE
(PHOSPHINE OR PHOSPHINES)
1630418 OXIDE
337424 OXIDES
1726440 OXIDE
(OXIDE OR OXIDES)
10256 PHOSPHINE OXIDE
(PHOSPHINE(W)OXIDE)

L2 4 PERFLUOROALKYLAT? (L) PHOSPHINE OXIDE

=> s l2 not l1

L3 1 L2 NOT L1

=> d l3 ibib ab

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1974:133558 CAPLUS

DOCUMENT NUMBER: 80:133558

TITLE: Perfluoroalkylated acids of phosphorus.
III. Diphenyl(trifluoromethyl)- and
diphenyl(trifluoroacetyl)phosphine
oxide as intermediates in the preparation of
bis(trifluoromethyl)diphenylphosphoranyl
diphenylphosphinate

AUTHOR(S): Sartori, P.; Hochleitner, R.

CORPORATE SOURCE: Inst. Anorg. Chem., Tech. Hochsch. Aachen, Aachen,
Fed. Rep. Ger.

SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie
(1974), 404(2), 164-6
CODEN: ZAACAB; ISSN: 0044-2313

DOCUMENT TYPE: Journal

LANGUAGE: German

AB Reaction of Ph₂PCl with CF₃CO₂H at 40° gave Ph₂P(O)CF₃ and
Ph₂P(O)COCF₃ as shown by ir, NMR and mass spectra. Above reaction
followed by heating 6 hr at 160-70°/2+ 10-2 mm gave 70%
Ph₂P(O)OPPh₂(CF₃)₂.

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```
=> e tris(penafluoroethyl)phosphine oxide/cn
E1      1      TRIS(PALMITATO)GALLIUM/CN
E2      1      TRIS(PALMITATO)IRON/CN
E3      0 --> TRIS(PENAFLUOROETHYL)PHOSPHINE OXIDE/CN
E4      1      TRIS(PENTABROMOPHENOXY)-S-TRIAZINE/CN
E5      1      TRIS(PENTABROMOPHENYL) PHOSPHATE/CN
E6      1      TRIS(PENTACARBONYLMANGANESE)THALLIUM/CN
E7      1      TRIS(PENTACHLOROPHENOXY)-S-TRIAZINE/CN
E8      1      TRIS(PENTACHLOROPHENOXY)TRIAZINE/CN
E9      1      TRIS(PENTACHLOROPHENOXY)TRIPHOSPHONITRILIC CHLORIDE/CN
E10     1      TRIS(PENTACHLOROPHENYL) PHOSPHATE/CN
E11     1      TRIS(PENTACHLOROPHENYL)GERMANE/CN
E12     1      TRIS(PENTACHLOROPHENYL)GERMANOL/CN
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=> e difluorotris(pentafluoroethyl)phosphine/cn
E1      1      DIFLUOROTRIS(N-NONAFLUOROBUTYL)PHOSPHORANE/CN
```

E2	1	DIFLUOROTRIS (NONAFLUOROBUTYL) PHOSPHORANE/CN
E3	0 -->	DIFLUOROTRIS (PENTAFLUOROETHYL) PHOSPHINE/CN
E4	1	DIFLUOROTRIS (PENTAFLUOROETHYL) PHOSPHORANE/CN
E5	1	DIFLUOROTRIS (TRIFLUOROMETHYL) PHOSPHORANE/CN
E6	1	DIFLUOROTRIS (TRIFLUOROMETHYL) PHOSPHORUS/CN
E7	1	DIFLUOROTRISULFANE (FS3F)/CN
E8	1	DIFLUOROTRITHIAZYL ION/CN
E9	1	DIFLUOROVINYLBORANE/CN
E10	1	DIFLUOROVINYLLIDENE/CN
E11	1	DIFLUOROVINYLLIDENECARBENE/CN
E12	1	DIFLUPHENAZINE AZALEATE/CN

=> e difluoro-tris(pentafluoroethyl)phosphine/cn

E1	1	DIFLUORO-P-FLUOROPHENYLBORANE/CN
E2	1	DIFLUORO-TERT-BUTYLBORANE/CN
E3	0 -->	DIFLUORO-TRIS (PENTAFLUOROETHYL) PHOSPHINE/CN
E4	1	DIFLUOROACETALDEHYDE/CN
E5	1	DIFLUOROACETALDEHYDE DIETHYL ACETAL/CN
E6	1	DIFLUOROACETALDEHYDE ETHYL HEMIACETAL/CN
E7	1	DIFLUOROACETALDEHYDE POLYMER/CN
E8	1	DIFLUOROACETATE/CN
E9	1	DIFLUOROACETATE ANION/CN
E10	1	DIFLUOROACETIC ACID/CN
E11	1	DIFLUOROACETIC ACID 1,2-DIMETHYLHYDRAZIDE/CN
E12	1	DIFLUOROACETIC ACID ETHYL ESTER/CN

=> e tris-penafluoroethylphosphine oxide/cn

E1	1	TRIS-PA/CN
E2	1	TRIS-PA (PHENOL)/CN
E3	0 -->	TRIS-PENAFLUOROETHYLPHOSPHINE OXIDE/CN
E4	2	TRIS-PHOSPHATE/CN
E5	1	TRIS-S-TRIAZOLO (1,5-A:1',5'-C:1",5"-E) -S-TRIAZINE/CN
E6	1	TRIS-S-TRIAZOLO (4,3-A:4',3'-C:4"',3'''-E) -S-TRIAZINE/CN
E7	1	TRIS-S-TRIAZOLO (4,3-A:4',3'-C:4"',3'''-E) -S-TRIAZINE, 3,7,11-TRIPHENYL-/CN
E8	1	TRIS-STERIL/CN
E9	1	TRIS-TC/CN
E10	1	TRIS-TETRAPROLIN (DROSOPHILA MELANOGASTER GENE DTIS11 REDUCED)/CN
E11	1	TRIS-TETRAPROLIN (HUMAN EPITHELOID CARCINOMA CELL GENE TTP)/CN
E12	1	TRIS-TETRAPROLIN (HUMAN GENE ZFP36 REDUCED)/CN

=> e tris-penafluoroethyl phosphine oxide/cn

E1	1	TRIS-PA/CN
E2	1	TRIS-PA (PHENOL)/CN
E3	0 -->	TRIS-PENAFLUOROETHYL PHOSPHINE OXIDE/CN
E4	2	TRIS-PHOSPHATE/CN
E5	1	TRIS-S-TRIAZOLO (1,5-A:1',5'-C:1",5"-E) -S-TRIAZINE/CN
E6	1	TRIS-S-TRIAZOLO (4,3-A:4',3'-C:4"',3'''-E) -S-TRIAZINE/CN
E7	1	TRIS-S-TRIAZOLO (4,3-A:4',3'-C:4"',3'''-E) -S-TRIAZINE, 3,7,11-TRIPHENYL-/CN
E8	1	TRIS-STERIL/CN
E9	1	TRIS-TC/CN
E10	1	TRIS-TETRAPROLIN (DROSOPHILA MELANOGASTER GENE DTIS11 REDUCED)/CN
E11	1	TRIS-TETRAPROLIN (HUMAN EPITHELOID CARCINOMA CELL GENE TTP)/CN
E12	1	TRIS-TETRAPROLIN (HUMAN GENE ZFP36 REDUCED)/CN

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NEWS 17 FEB 22 The IPC thesaurus added to additional patent databases on STN
NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added
NEWS 19 FEB 27 New STN AnaVist pricing effective March 1, 2006
NEWS 20 FEB 28 MEDLINE/LMEDLINE reload improves functionality
NEWS 21 FEB 28 TOXCENTER reloaded with enhancements
NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral
property data
NEWS 23 MAR 01 INSPEC reloaded and enhanced
NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

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CN 1207089	IPCI	C07C0323-03 [N,A] C07B0041-02 [ICM,6]; C07C0029-62 [ICS,6]; C07C0029-38 [ICS,6]; C07C0033-50 [ICS,6]; C07C0045-45 [ICS,6]; C07C0049-80 [ICS,6]; C07C0219-06 [ICS,6]; C07F0007-18 [ICS,6]; C07C0305-06 [ICS,6]
JP 2000500480	IPCI	C07B0041-02 [ICM,7]; C07C0029-38 [ICS,7]; C07C0029-62 [ICS,7]; C07C0033-46 [ICS,7]; C07C0213-00 [ICS,7]; C07C0215-08 [ICS,7]; C07C0303-24 [ICS,7]; C07C0305-06 [ICS,7]; C07C0319-14 [ICS,7]; C07C0323-09 [ICS,7]; C07F0007-18 [ICS,7]
AT 225761	IPCI	C07B0041-02 [ICM,7]; C07C0029-62 [ICS,7]; C07C0029-38 [ICS,7]; C07C0033-50 [ICS,7]; C07C0045-45 [ICS,7]; C07C0049-80 [ICS,7]; C07C0219-06 [ICS,7]; C07F0007-18 [ICS,7]
ES 2180811	IPCI	C07B0041-02 [ICM,7]; C07C0029-62 [ICS,7]; C07C0029-38 [ICS,7]; C07C0033-50 [ICS,7]; C07C0045-45 [ICS,7]; C07C0049-80 [ICS,7]; C07C0219-06 [ICS,7]; C07F0007-18 [ICS,7]; C07C0305-06 [ICS,7]; C07C0319-14 [ICS,7]; C07C0323-03 [ICS,7]
US 6096926	IPCI	C07C0215-00 [ICM,7]; C07C0023-00 [ICS,7]; C07C0019-08 [ICS,7]
	IPCR	C07B0041-00 [I,C]; C07B0041-02 [I,A]; C07C0029-00 [I,C]; C07C0029-38 [I,A]; C07C0029-62 [I,A]; C07C0313-00 [I,C]; C07C0313-04 [I,A]; C07C0319-00 [I,C]; C07C0319-14 [I,A]; C07C0323-00 [N,C]; C07C0323-03 [N,A]
	NCL	564/355.000; 564/503.000; 570/124.000; 570/134.000
	ECLA	C07B041/02; C07C029/38; C07C029/62; C07C313/04; C07C319/14
US 6355849	IPCI	C07C0022-00; C07C0019-08; C07C0017-26; C07C0215-00
	IPCR	C07B0041-00 [I,C]; C07B0041-02 [I,A]; C07C0029-00 [I,C]; C07C0029-38 [I,A]; C07C0029-62 [I,A]; C07C0313-00 [I,C]; C07C0313-04 [I,A]; C07C0319-00 [I,C]; C07C0319-14 [I,A]; C07C0323-00 [N,C]; C07C0323-03 [N,A]
	NCL	570/144.000; 564/355.000; 570/127.000; 570/147.000; 570/171.000
	ECLA	C07B041/02; C07C029/38; C07C029/62; C07C313/04; C07C319/14

OTHER SOURCE(S): CASREACT 127:50384; MARPAT 127:50384

ABSTRACT:

The title method comprises contacting a material of formula RH (R = perfluoroalkyl) and a base, or a species capable of generating a base, with a substrate bearing at least one electrophilic group in a polar anhydrous medium. Thus, PhCHO and CF₃H in DMF containing Me₃COH at -10° gave 73% PhCH(OH)CF₃.

SUPPL. TERM: perfluoroalkylation ketone electrophile;
phenyltrifluoroethanol prepn

INDEX TERM: Haloalkylation
(perfluoroalkylation; perfluoroalkylation of ketones and other electrophiles)

INDEX TERM: 340-05-6P, 1-Phenyl-2,2,2-trifluoroethanol 345-40-4P,
2,2,3,3,3-Pentafluoro-1-Phenyl-1-propanol 403-66-7P,
1-Trifluoromethylthio-4-nitrobenzene 421-53-4P, Fluoral
hydrate 434-45-7P, 2,2,2-Trifluoroacetophenone
456-56-4P, Trifluoromethylthiobenzene 718-64-9P
ROLE: IMF (Industrial manufacture); SPN (Synthetic
preparation); PREP (Preparation)

INDEX TERM: (perfluoroalkylation of ketones and other electrophiles)
93-58-3, Methyl benzoate 100-52-7, Benzaldehyde, reactions
127-63-9, Phenyl sulfone 139-66-2, Diphenyl thioether
937-32-6, 4-NitroPhenylsulfenyl chloride 16629-89-3,
Benzeneethanol, 2,2-Dichloro-2-fluoro-
ROLE: RCT (Reactant); RACT (Reactant or reagent)